

Commonwealth of Pennsylvania

BOARD OF  
GAME COMMISSIONERS



BIENNIAL REPORT

1933 - 1934



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# LETTER OF TRANSMITTAL

Harrisburg, Pa.,  
October 8, 1934.

TO HIS EXCELLENCY, GIFFORD PINCHOT  
*Governor of Pennsylvania*

Sir:

Complying with the Acts of General Assembly, we herewith submit a report of the biennial period from June 1, 1932 to May 31, 1934.

Attached to this report is a detailed account of the activities and accomplishments of the various bureaus of the Board, all of which are supplemented by complete statistical statements which appear in the appendix.

In submitting this report for your consideration we wish to take this opportunity to express our appreciation of the splendid interest manifested in and the helpful cooperation extended to this Board by your Excellency, the Members of the Legislature, and the various other departments of the State Government during the two years.

Respectfully submitted,

ADOLF MULLER, <i>President,</i>	Norristown
RICHARD E. REITZ, <i>Vice-President,</i>	Brookville
DR. W. H. MOORE,	Philadelphia
RALPH L. ECKENSTEIN,	Williamsport
DR. S. H. WILLIAMS,	Pittsburgh
HOWARD STEWART,	Clearfield
A. HUNTER WILLIS,	Erie
J. Q. CREVELING,	Wilkes-Barre

ATTEST:

ERNEST E. HARWOOD  
*Executive Secretary*  
Harrisburg

# REPORT of the EXECUTIVE SECRETARY

MEMBERS OF THE BOARD OF GAME COMMISSIONERS,  
COMMONWEALTH OF PENNSYLVANIA,  
HARRISBURG, PENNSYLVANIA.

Gentlemen :

Following is a complete report covering in order the various activities of the Board of Game Commissioners during the past biennium. It is gratifying to note that the revenue credited to the Game Fund during this period reached the second highest mark in the history of the Department, the record having been established during the biennium of 1931-32. During the past two fiscal years there were credited to the Game Fund \$2,317,305.00, whereas during the previous two years \$2,667,813.84 were credited. Complete financial statements are appended at the end of this report for your further information.

Among the outstanding achievements was the acquisition of 106,433 acres of additional State Game Land, bringing the aggregate area now owned by the sportsmen of Pennsylvania to 426,575 acres.

Tremendous progress was also made in game propagation by the establishment of an additional Game Farm for rearing ringnecked pheasants and carrying on experiments in rabbit propagation, and by the installation at this and at the three other Game Farms previously established of the most modern electrical and mechanical equipment.

I would like also at this time to commend the various sportsmen's associations and individuals for their wholehearted support of our program during the past two years. It was through their loyalty and interest that we were able to solve the many intricate problems which came before us and it is to them we owe much of our success.

Too much cannot be said of the enthusiasm and efficiency of our own personnel, and although there was a noticeable increase in field and administrative duties they cooperated so admirably as to have more than met these added responsibilities.

## LEGISLATION

During the 1933 Session of the Legislature certain important amendments were made to the Game Code as follows:

Act 10-A: It provides for an appropriation of \$24,820.00 from the Game Fund to the State Retirement System to meet obligations of Commission employees.

Act 30: This Act empowers the Game Commission and the Department of Forests and Waters to purchase lands from County Commissioners.

Act 159: It amends Section 705 of the Game Code by making it lawful for a member of a hunting camp who has killed a legal bear, deer, or elk, to cooperate with the rest of the camp *only in the manner known as driving* in an effort to secure the camp quota of six.

Act 160: It gives added protection to the raccoon by removing it from the fur-bearing animal list.

Act 165: This Act empowers the Department of Forests and Waters and the Game Commission to purchase seated and unseated lands from County Treasurers.

Act 179: It amends Sections 1, 2 and 3 of the Act of April 21, 1915, by directing the County Commissioners to offer for sale to the Department of Forests and Waters and the Game Commission lands which they may have purchased at County Treasurer's sales.

Act 258: This Act further amends Section 302 of the Game Code by providing for the identification of persons applying for hunting licenses.

## LAW ENFORCEMENT

Game Law enforcement during the biennium brought many perplexing problems. Economic conditions were so disturbed that to have inflicted full penalties under the law would have tended only to increase hardships.

The 3,950 prosecutions brought in the past two years is therefore somewhat below the number for the previous biennium, 6,468. We have reason to believe, however, that there were fewer violations and that our policy of protection by education is having the desired effect in promoting a better respect for wildlife conservation.

The following tabulation indicates the trend in the collection of penalties for Game Law violations:

Penalties collected in fiscal year 1930-31 .....	*\$96,251.50
Penalties collected in fiscal year 1931-32 .....	58,483.72
Penalties collected in fiscal year 1932-33 .....	44,434.46
Penalties collected in fiscal year 1933-34 .....	38,938.83

\*More penalties collected due to open season on both sexes of deer.

The decrease in penalties is also due, to some extent, to the fact that many convicted persons in recent years had to be imprisoned due to inability to pay cash penalties, whereas in more prosperous years, such as 1929 and 1930, more money was available to avoid prison terms.



## PROSECUTIONS

The 3,950 prosecutions this biennium included the following:

Illegal deer cases .....	622
Killing game in closed season .....	928
Dogs chasing game unlawfully .....	154
Aliens possessing firearms .....	118
Aliens possessing dogs .....	65
Fish cases .....	347
Miscellaneous cases (including "hunting without license, unlawful trapping, killing protected birds," etc.) .....	1,710
<b>Total .....</b>	<b>3,950</b>

## HUNTER'S LICENSE REVOKED

Upon the recommendation of the Board of Game Commissioners, the Department of Revenue during the biennium denied 338 persons the right to hunt. Of this number 200 were revoked in 1932 and 138 in 1933. During the previous two years 505 hunter's licenses were revoked. Incidentally, this is about the hardest punishment for a hunter to bear, and often brings the desired results when other penalties fail.

## GAME FEEDING

During the two winters just past, the Board spent \$23,555.81 to feed wild game birds and animals, as follows:

Cost of wild game feed 1932-33 .....	\$11,620.80
Cost of wild game feed 1933-34 .....	11,935.01
<b>Total .....</b>	<b>\$23,555.81</b>

The artificial feeding of game birds and animals has undoubtedly brought much of our breeding stock safely through the winters. Had it not been for the perseverance of our field officers, ably assisted by interested sportsmen, Boy Scouts, farmers and others, in feeding game such as quail, pheasants, wild turkeys and squirrels, the heavy snowfalls in many sections would have meant death to many of these creatures. Corn on the cob furnished a major portion of this feed, although thousands of pounds of mixed scratch grain were placed for the smaller birds. Rock salt was widely distributed in deer territory. The Board feels deeply indebted to the hundreds of individuals who so kindly contributed their assistance in feeding game.

## DEER KILLED TO PROTECT PROPERTY

There was a considerable decrease (44%) in the number of deer killed by farmers to protect crops. In the two years ending May 31, 1934, farmers killed 1,299 deer in the act of destroying produce, which included wheat, rye, buckwheat, vegetables, apples and young fruit

trees. In the two previous years 2,300 deer were killed to protect property. The killing was confined to 45 counties.

Disposition of the animals killed is as follows:

Retained for food .....	1,192	91.8%
Sent to hospitals, etc. ....	78	6.0%
Unfit for food .....	29	2.2%
<b>Total .....</b>	<b>1,299</b>	<b>100.0%</b>

## BEAR DAMAGE

The low number of bear damage claims, 58, received in the past two years possibly reflects the alarming decrease in our bear population. The Bear Damage Law provides for paying for damages to livestock, poultry or bees to the extent of \$6,000, which is appropriated for the two fiscal years and is paid out of the Game Fund. However, \$1,059.30 of this amount was required to be paid during the past biennium. The following statement shows the claims received by counties:

<i>County</i>	<i>No. Claims</i>	<i>Sheep Killed</i>	<i>Bee Hives</i>	<i>Cattle</i>	<i>Goats</i>	<i>Horses</i>	<i>Amount Paid</i>
Bedford .....	9	28	.....	.....	.....	.....	\$143.20
Cameron .....	2	2	.....	.....	.....	.....	14.00
Jefferson .....	3	.....	4	.....	.....	.....	21.00
Luzerne .....	1	.....	4	.....	.....	.....	58.60
Lycoming .....	5	21	2	.....	.....	.....	133.00
McKean .....	8	6	10	.....	.....	1	198.00
Potter .....	9	6	3	3	.....	.....	88.50
Sullivan .....	10	14	1	4	.....	.....	171.00
Tioga .....	8	22	6	.....	.....	.....	193.00
Warren .....	2	3	1	.....	2	.....	32.00
Wyoming .....	1	1	.....	.....	.....	.....	7.00
<b>Total .....</b>	<b>58</b>	<b>103</b>	<b>31</b>	<b>7</b>	<b>2</b>	<b>1</b>	<b>\$1,059.30</b>

## PROPAGATION

The propagation activities of the Board of Game Commissioners have shown decided advances during the calendar years 1932 and 1933. The efficiency of the three game farms already established was greatly increased and the year 1933 saw the first stages of the establishment of the new Loyalsock State Game Farm located on the Loyalsock Creek, a few miles above Montoursville, in Lycoming County.

Although the Game Commission does not offer any of the game raised for sale, the general tendency to lower commercial prices of game, partly due to the Commission's propagation activities, continue and at the present time first-class ringnecked pheasants may be purchased for \$2.00 apiece or under, whereas only a few years ago these birds brought as high as \$6.00 apiece. Corresponding decreases in the prices of other game birds now raised by the Commission are also noted. Thus, through its propagation activities, the Game Commission has checked the rising prices of game and raised the standard of quality of the game stocked.

During the biennium there have been many general improvements about the game farms. Various advances in operating technique have brought about not only greater efficiency, but also greater production. Also, throughout the winter of 1933-34 much general land improvement was carried on at the farms with funds and labor made available through the Civil Works Administration. This aid was most helpful in the establishment of the new Loyalsock Farm.

The status of the various introduced and native game birds propagated by the Commission has been greatly improved during the biennium. The ringnecked pheasant population continues to increase in numbers, and due to the increased output of the game farms the number of these birds available for restocking purposes has been greatly increased. The bob-white quail and wild turkey populations have increased appreciably, and the number of these birds available for restocking has also been increased due to the improved operation of the game farms. The Hungarian Partridges stocked by the Commission are beginning to show signs of permanent establishment, as are the Reeves Pheasants also. The grouse and rabbit stocking problems still exist, but it is hoped that these will be solved in the near future. A number of sharp-tail grouse imported from Canada have been released in various parts of the State and the results of these plants will be watched with great interest.

## FISHER STATE GAME FARM

Largely due to the favorable results obtained in experiments with mechanical equipment in the propagation of game birds by the Game Commission, with the cooperation of Pennsylvania State College, the chicken hen method of pheasant incubation used at the Farm in 1933 was supplanted with mechanical equipment of the electric type. The figures presented below show the benefits derived from this change in operating methods. Under this system the pheasant eggs are incubated and hatched in an all-electric incubator hatcher and are later cared for in colony brooder houses with electrically controlled hovers. The statistics for the two calendar years 1932 and 1933 are briefly given in the following table:

### RINGNECKED PHEASANTS

	<i>Calendar Year</i>	
	<i>1932</i>	<i>1933</i>
Total number of eggs produced .....	52,584	54,745
Total number of eggs shipped to sportsmen, farmers and others .....	36,565	25,524
Total number eggs set at farm .....	14,300	25,930
Total number of eggs broken or used for food .....	1,719	3,291
Total number birds shipped for restocking purposes ..	4,539	14,322*

\*Does not include 400 day old chicks shipped.



The propagation of quail by electrical methods similar to those employed in the propagation of pheasants was begun at the Fisher Farm in 1932. The results obtained during the first two years of this work are briefly outlined below:

### BOB-WHITE QUAIL

	<i>Calendar</i> 1932	<i>Year</i> 1933
Total number of eggs produced .....	6,242	16,371
Total number of eggs broken or used for food .....	57	151
Total number eggs set at farm .....	6,333*	16,266*
Total number birds shipped for restocking purposes ..	1,860	4,429

\*Includes a few eggs from nests of wild birds.

### JORDAN STATE GAME FARM

At the Jordan Farm, as well as the Fisher Farm, mechanical equipment was installed in 1933, and although the improvement over 1932, when chicken hens were used for incubation and brooding purposes, was not as great as was that at the Fisher Farm, due to faulty brooding equipment, the results shown in the table below further prove the wisdom of substituting the mechanical equipment for the chicken hen.

### RINGNECKED PHEASANTS

	<i>Calendar</i> 1932	<i>Year</i> 1933
Total number eggs produced .....	55,015	61,264
Total number eggs broken or used for food .....	1,124	2,093
Total number eggs shipped to sportsmen and others ..	35,431	28,090
Total number eggs set at farm .....	18,460	31,081
Total number birds shipped for restocking purposes ..	5,079	7,649*

\*Does not include 1,555 chicks shipped when 1 day old.

### REEVES PHEASANTS

	<i>Calendar</i> 1932	<i>Year</i> 1933
Total number eggs produced .....	95	631
Total number eggs broken or used for food .....	27	38
Total number eggs set at farm .....	68*	593
Total number birds raised .....	15	23

\*Farm eggs only. A number of purchased eggs also set.

### STATE WILD TURKEY FARM

Various improvements were made at the Turkey Farm during 1932 and 1933 and the farm is now operated with first-class mechanical equipment. A brief summary of the work carried on is shown in the following tables:

## WILD TURKEYS

	<i>Calendar 1932</i>	<i>Year 1933</i>
Total number eggs produced .....	1,810	4,625
Total number eggs broken or used for food .....	54	262*
Total number eggs set at farm .....	1,756	4,363
Total number birds shipped for restocking purposes ...	.556	1,040

\*Includes 12 eggs shipped to Bureau of Animal Industry Laboratory.

## COOPERATION OF SPORTSMEN AND FARMERS IN PROPAGATING RINGNECKED PHEASANTS

During the calendar years 1932 and 1933 the Commission shipped 115,805 pheasant eggs to farmers and sportsmen throughout the Commonwealth, who incubated the eggs and liberated the birds raised on non-posted lands near their homes. From the 62,191 eggs shipped to sportsmen and farmers during the year 1932, over 16,000 pheasants were reared and released, while from the 53,614 eggs shipped during 1933 approximately 11,000 birds were reared and released. Thus, in addition to the pheasants raised and liberated from the Fisher and Jordan Farms, approximately 27,000 pheasants raised from eggs produced at these two farms were released throughout the State.

## LOYALSOCK STATE GAME FARM

At a meeting of the Board held August 21, 1933, authorization was granted for the purchase of 217.3 acres of land, mostly cleared, in Eldred Township, Lycoming County. Here during the winter of 1933-34 the Loyalsock State Game Farm was established. At this farm advanced experiments in the propagation of cottontail rabbits will be carried on, along with the propagation of ringnecked pheasants.

## GAME PURCHASES

During the biennium the Commission expended \$104,270.85\* for the purchase of the game listed below:

	<i>Fiscal Year Number</i>	<i>1932-33 Cost</i>	<i>Fiscal Year Number</i>	<i>1933-34 Cost</i>
Cottontail Rabbits .....	62,490	\$41,419.20	55,336	\$34,949.00
Varying Hares .....	2,003	1,999.00	.....	.....
Ringnecked Pheasants .....	3,619	9,020.00	2,483	3,642.90
Reeves Pheasants .....	327	2,559.00	91	615.00
Bob-White Quail .....	.....	.....	129	129.00
Wild Turkeys .....	.....	.....	60	159.00
Raccoons .....	447	3,804.50	156	874.50
Fox Squirrels .....	510	765.00	.....	.....
Hungarian Partridges .....	1,204	3,394.75	.....	.....
Grouse (192 Sharptail—43 Ruffed) .....	.....	.....	235	940.00
		\$62,961.45		\$41,309.40

\* Does not include following purchases of game used for propagating purposes: 58 Cottontail Rabbits, \$58.00; 21 Reeves Pheasants, \$134.00; 14 Wild Turkeys, \$55.00; 3 Raccoons, \$15.00.

Expressage on the above game amounted in 1932-33 to \$17,211.96, and in 1933-34 to \$14,210.80, making a total of \$31,422.76.

## TRAPPING OF WILD GAME

Field Officers of the Commission carried on extensive game trapping operations during the biennium. Under these operations wild game was trapped on various areas closed to hunting and later released in areas open to hunting. This work resulted in the trapping and releasing of 8,296 head of game as listed:

	<i>Fiscal Year</i> 1932-1933	<i>Fiscal Year</i> 1933-1934
Ringnecked Pheasants .....	2,572	2,693
Cottontail Rabbits .....	733	1,069
Gray Squirrels .....	18	738
Bob-White Quail .....	236	233
Raccoon .....	....	4
	<hr/> 3,559	<hr/> 4,737

In addition to the game listed above, a number of rabbits were removed from nurseries and garden areas where they were causing damage. In the majority of these cases the rabbits were trapped by individuals who were paid fifty cents for each rabbit trapped on these areas and turned over to the District Game Protector for release elsewhere.

## GAME RELEASES

The following game from the sources indicated was released within the Commonwealth during the biennium:

	<i>Fiscal Year 1932-1933</i>			<i>Total</i>
	<i>Game Farms</i>	<i>Purchase</i>	<i>Trapping</i>	
Cottontail Rabbits .....	....	62,490	733	63,223
Varying Hares .....	....	2,003	....	2,003
Ringnecked Pheasants .....	9,618	3,619	2,572	15,809
Reeves Pheasants .....	....	327	....	327
Bob-White Quail .....	1,860	....	236	2,096
Wild Turkeys .....	556	....	....	556
Hungarian Partridges .....	....	1,204	....	1,204
Fox Squirrels .....	....	510	....	510
Gray Squirrels .....	....	....	18	18
Raccoons .....	....	447	....	447
Total head of game .....				<hr/> 86,193

	<i>Fiscal Year 1933-1934</i>			
Cottontail Rabbits .....	....	55,336	1,069	56,405
Ringnecked Pheasants .....	21,971	2,483	2,693	27,147
Reeves Pheasants .....	....	91	....	91
Bob-White Quail .....	4,429	129	233	4,791
Wild Turkeys .....	1,040	60	....	1,100
Gray Squirrels .....	....	....	738	738
Raccoons .....	....	156	....	156
Grouse (Ruffed & Sharptail) ....	....	235	....	235
Total head of game .....				<hr/> 90,663

Thus during the biennium the Commission released 176,856 head of game, while in addition to this number sportsmen and farmers

reared and released over 27,000 pheasants, which were hatched from eggs furnished by the Commission.

## **COTTONTAIL RABBIT PROPAGATION EXPERIMENTS**

Realizing the popularity of the sport of rabbit hunting and faced with the possibility that in the near future it may become impossible to obtain rabbits for restocking purposes from the western states, the Commission has continued its experiments in the propagation of cottontail rabbits. During 1932 propagating experiments were carried out at the Fisher State Game Farm, the Jordan State Game Farm and at Game Refuge No. 23 in Huntingdon County. The results obtained from these experiments during 1932 and 1933 were not conclusive, but additional work is to be carried on along these lines. The rabbit propagating area at the Fisher Farm has been enlarged and experiments will also be carried out at the new Loyalsock State Game Farm; and by the end of the calendar year 1934 it is hoped that definite figures and information will be available on this subject.

## **RUFFED GROUSE PROPAGATION EXPERIMENTS**

Up to the present time the Game Commission has not carried out any extensive experiments in the propagation of Ruffed Grouse. A few of these birds have been propagated at the Fisher State Game Farm and it is hoped that this work may be extended in the near future. Also, every effort has been made by the Commission to cooperate with those who are engaged in this work throughout the Commonwealth and each year permits to take wild grouse eggs are issued to a limited number of persons who have sufficient knowledge and equipment to handle such eggs satisfactorily.



# BUREAU OF REFUGES AND LANDS

## AUTHORIZATION AND DUTIES

Work conducted through the Bureau of Refuges and Lands is authorized by provisions contained in Article VIII of the Game Code. It is financed by a fund within the Game Fund, accruing from 75 cents of each resident hunter's license fee, as provided in the fourth paragraph of Section 1201 of the Game Code.

Its duties, briefly summarized, are the acquisition of lands by purchase and lease and the creation and maintenance of game refuges and public hunting grounds.

## EXPENDITURES

Expenditures through the Bureau for the biennium covered by this report amounted to \$771,806.32, as against \$943,893.09 for the previous biennium. The difference is largely reflected in the land purchase program, \$554,403.11 having been paid for lands during the 1930-1932 biennium, as against \$377,016.27 for the 1932-1934 biennium.

\$504,887.24, or a little more than 65% of expenditures during the 1932-1934 biennium, is directly chargeable to capital, leaving less than 35% chargeable to maintenance. This does not include any portion of administrative and office expense. Maintenance expenditures increased about 5% over those for the previous biennium. Maintenance and operation costs must of course increase with larger land holdings, but there is no evidence yet to indicate that any great curtailment in the land purchase program is necessary. Expenditures charged to capital were:

	<i>Fiscal Year 1932-33</i>	<i>Fiscal Year 1933-34</i>
Consideration Paid for Lands .....	\$178,063.28	\$198,952.99
Title Abstracting and Conveyancing .....	38,107.26	25,724.18
Boundary Line Surveying .....	34,251.66	23,252.10
New Buildings .....	4,814.69	1,721.08
<b>Total For Fiscal Years .....</b>	<b>\$255,236.89</b>	<b>\$249,650.35</b>
<b>Total for the Biennium .....</b>		<b>\$504,887.24</b>

Attention is called to the fact that although \$178,063.28 for the fiscal year 1932-1933 and \$198,952.99 for the year 1933-1934 are stated above as the consideration paid for lands, the actual amounts paid to the respective grantors for the two years were \$167,195.45 and \$202,573.37. The reason for these discrepancies is that settlement checks obtained from the State Treasury must frequently be held for days or weeks before settlement can be made, regardless of the fact that

they must be shown in departmental accounts as expenditures as soon as the checks are received from the State Treasury. On May 31, 1933, settlements were pending for seven cases amounting to \$10,867.83, all of which, however, were settled during the following fiscal year. On May 31, 1934, settlements were pending in eleven cases involving \$7,247.45.

Administrative and office expense amounted to \$61,611.91, as against \$64,750.31 for the previous biennium. Expenditures charged against administration and office expense were:

	<i>Fiscal Year</i> 1932-33	<i>Fiscal Year</i> 1933-34
Salaries .....	\$24,869.03	\$24,344.82
Travel Expenses .....	1,887.62	1,367.85
Automobiles, Purchase and Maintenance .....	1,247.74	2,220.04
Office Equipment and Supplies .....	2,849.32	2,145.48
Miscellaneous .....	521.88	158.13
Total for Fiscal Years .....	\$31,375.59	\$30,236.32
Total for the Biennium .....		\$61,611.91

Expenditures for maintenance of the system of primary refuges and public hunting grounds, including State Game Lands, amounted to \$202,249.23, as against \$191,799.52 for the previous biennium. Expenditures for the biennium covered by this report follow:

	<i>Fiscal Year</i> 1932-33	<i>Fiscal Year</i> 1933-34
Salaries of Refuge Keepers .....	\$39,135.21	\$41,184.86
Expense of Refuge Keepers .....	10,106.59	13,354.38
Maintenance of Refuge Buildings .....	5,410.56	2,240.13
Cutting and Mowing Refuge Lines, Old and New, and Maintaining Fire Protection Trails .....	10,897.76	7,987.63
Construction and Maintenance of Roads .....	7,646.23	2,821.27
Planting Food and Cover for Game .....	498.37	122.60
Horses and Horse Feed .....	851.39	1,354.26
Feed for Game .....	474.62	413.14
Equipment and Supplies .....	5,976.35	3,500.72
Motor Equipment and Supplies .....	744.43	4,363.09
Fixed Charges in Lieu of Taxes on Purchased Lands .....	15,943.03	18,573.29
Legal Services—Suit in Equity, etc. ....		197.67
Workmen's Compensation Insurance .....		2,013.07
State Retirement Fund .....		3,200.00
Miscellaneous Items .....	906.20	2,332.38
Total for Fiscal Years .....	\$98,590.74	\$103,658.49
Total for the Biennium .....		\$202,249.23

Maintenance of the auxiliary refuge system cost \$3,057.94 for this biennium, as against \$4,980.61 for the previous biennium.

## ACQUISITION OF LANDS

A total of 106,433 acres of State Game Lands, all purchased from the Game Fund, were conveyed to the Commonwealth during this biennium, bringing the aggregate area at the end of the biennium to

426,575 acres. This acreage is distributed through forty-six (46) of the sixty-seven (67) counties of the State. The acreage within the various counties is indicated in Table No. 1, on page 34 of this report. The acreage conveyed and cost of same for each year since 1920, when the first purchase was consummated, will be found in Table No. 2, on page 35. The acreage acquired in the various blocks of game lands, and cost, will be found in Table No. 3, on pages 36 and 37. It will be noted that at the end of the biennium a total of \$1,541,031.17 of the sportsmen's money had been paid for lands during a period of fourteen (14) years, an average of \$3.61 per acre. 52,000 acres additional were, at the end of the biennium, under contract for purchase, representing an obligation of about \$153,000.

During this biennium 239 options for more than 200,000 acres of land were secured from landowners. Approximately half of these options were accepted by the Board. A careful examination to determine their suitability as game lands and their value as such was made of practically all of these lands before the options were considered and acted upon by the Board.

Approximately 95% of State Game Land acreage is wooded and about 5% made up of farms and orchards abandoned as such. The wooded areas are primarily the habitat of bear, deer, wild turkeys, ruffed grouse, squirrels, raccoon, snowshoe rabbits, and to a lesser extent of cottontail rabbits. Such species as bobwhite quail, ringnecked pheasants and by far the largest proportion of cottontail rabbits require more open territory. With this in mind, special efforts have been exerted during the past few years to acquire the so-called abandoned farms. A number of these farms, aggregating several thousand acres, were purchased during the biennium.

## **TITLE ABSTRACTING AND CONVEYANCING**

The chain of titles for every tract of land approved for purchase by the Board is carefully searched, abstracted and title defects cured before the tract is conveyed to the Commonwealth. This work is done under the direction of the Department of Justice and is a safeguard against adverse claims in the future. The thoroughness with which titles have been scrutinized is evidenced by the fact that only three adverse claims have been made during the fourteen years of the Game Commission land purchase program. Two of these claims could not be substantiated, and the third, involving less than one hundred acres, is pending.

The cost of title abstracting and conveyancing has been running about fifty-two cents per acre. At first glance this might be considered high, but as careful search of titles is the only possible insurance against losses in the future, the expense is justified.



During this biennium one hundred fifty-five deeds conveying 106,433 acres of State Game Lands, and one deed for the Loyalsock Game Farm conveying 217.3 acres, passed to the Commonwealth.

A system of recording and indexing deeds, somewhat similar to, but not so complicated as that used in the various county court houses, was recently set up. All Game Commission deeds are now being transcribed in deed record books and indexed. This recording and indexing will be completed in a few months time. All original deeds of Commonwealth owned property, regardless of the state department having jurisdiction over the land, are filed in the office of the Department of Internal Affairs.

## **BOUNDARY LINE SURVEYS AND MAPPING**

The boundary lines of each tract of land approved for purchase are surveyed before the deed of conveyance is prepared. This is essential to determine definitely the acreage to be paid for, and so that the lines and corners can be correctly marked on the ground. During this biennium a total of 184 tracts, aggregating 139,949 acres and distributed in 41 counties, were surveyed. The length of lines surveyed and marked on the ground totalled 825.5 miles. The cost of boundary line surveys, including the time and expenses of salaried officers, labor, transportation, etc., is running about 41 cents per acre.

Various types of maps of game lands and game farms are essential in connection with land acquisition activities, establishment and maintenance of game refuges and administration work in general. Maps of the individual blocks of State Game Lands have been much in demand by hunters of the State, but until recently none were available for public distribution. Reproductions to a size of 12" x 18" were made of 39 blocks of State Game Lands toward the end of the biennium and are now being distributed to the public upon request. Maps of other blocks of game lands are being prepared, with the ultimate idea of having reproduction of all the important tracts available for public use.

## **STATUTORY FIXED CHARGES IN LIEU OF TAXES**

Since Commonwealth-owned property is not subject to taxation, the Game Commission pays a statutory fixed charge of five cents per acre in lieu of taxes for every acre of land acquired, regardless of whether it is used for refuges and public hunting grounds or for game farm purposes. This five cents is apportioned as follows: the respective road supervisors and the school supervisors each receive two cents for every acre the Game Commission has purchased in their township. For each acre within the respective counties the county treasurer re-



ceives one cent for use of the county. During this biennium payments were made to 185 townships and 46 counties. The total amount of money involved was \$34,516.32.

## ACREAGE IN GAME REFUGES

The abundance of deer throughout the state indicated early in the biennium that little, if any, additional protection for this species of game was required. To the contrary, it was quite evident that certain other species, particularly wild turkeys and ruffed grouse, needed all the protection which refuges would afford them. Refuges containing several thousand acres of woodland have proven most efficient in increasing the supply of deer. For smaller species much more numerous areas, but smaller in size, that is, areas from 100 to 800 acres, are required. During this biennium twenty-three additional primary refuges, aggregating 8,410 acres, or an average of 366 acres each, and four auxiliary refuges, totalling 845 acres, were established. The newly established refuges were:

Primary No.	19-A (U. S.)	Forest County .....	400	acres
"	" 36-A	Bradford County .....	180	"
"	" 36-B	Bradford County .....	265	"
"	" 37	Tioga County .....	334	"
"	" 40	Carbon County .....	311	"
"	" 45	Venango County .....	289	"
"	" 46	Lancaster County .....	210	"
"	" 47	Venango County .....	375	"
"	" 51-A	Fayette County .....	727	"
"	" 51-B	Fayette County .....	317	"
"	" 52	Lancaster County .....	195	"
"	" 54-A	Jefferson County .....	580	"
"	" 57-A	Wyoming County .....	590	"
"	" 57-B	Wyoming County .....	325	"
"	" 57-C	Wyoming County .....	360	"
"	" 58-B	Columbia County .....	367	"
"	" 59	Potter County .....	466	"
"	" 61	McKean County .....	548	"
"	" 63	Clarion County .....	328	"
"	" 69	Crawford County .....	472	"
"	" 70	Wayne County .....	228	"
"	" 79	Cambria County .....	300	"
"	" 82	Somerset County .....	243	"
Auxiliary No.	73	Indiana County .....	180	"
"	" 74	Luzerne County .....	226	"
"	" 75	Snyder County .....	200	"
"	" 76	Lebanon County .....	239	"

The boundary lines of the following refuges were altered for one reason or another:

Primary No.	3	Franklin County
"	" 23	Huntingdon County
"	" 31	Jefferson County
"	" 44-A & 44-B	Elk County (previously auxiliaries)
"	" 54-B	Jefferson County
"	" 56-A & 56-B	Bucks County (previously auxiliaries)

New wire was strung around the following refuges:

Primary No.	8	Lycoming County
"	"	9
"	"	17
"	"	18
"	"	23
"	"	24
		Huntingdon County
		Potter & Cameron Counties
		Mifflin County
		Huntingdon County
		Forest County

The following refuges were abandoned:

Auxiliary No.	7	Allegheny County	255	acres
"	"	66	Westmoreland & Fayette Counties	238
"	"	68	Bradford County	166
"	"	70	Armstrong County	132

Several of the tracts leased for auxiliary refuge purposes were purchased, becoming State Game Lands, resulting in reclassifying them from auxiliaries to primary refuges. At the end of the biennium the primary system included:

56 on State Game Lands, totalling	45,510	acres
20 on State Forests, totalling	45,612.7	"
1 on the Allegheny National Forest, containing	400	"
<hr/> 77	<hr/> 91,522.7	<hr/> "

The auxiliary system consisted of 52 refuges, totalling 19,543 acres.

For details as to the location and acreage of all refuges maintained at the end of the biennium see Tables Nos. 4 and 5, on pages 38 and 40 of this report.

## MAINTENANCE OF STATE GAME LANDS AND REFUGES

Each year, between the latter part of July and the middle of September, refuge boundaries are mowed, the refuge wire repaired and posters replaced wherever necessary. Fire protection roads and trails on State Game Lands and within refuges are also mowed and repaired. Likewise, insofar as time and funds permit, the boundary lines of State Game Lands, especially where they are particularly desirable as fire protection trails, are annually brushed out or mowed. Much of the work is ordinarily accomplished by refuge keepers. During the winter of 1933-1934, with the assistance secured through the Civil Works' Administration, much more of this work was made possible. Civil Works' Administration workers opened up 1,140 miles of fire trails along the boundary lines of State Game Lands, and in addition opened up 457 miles of interior fire trails and roads, and constructed 5 miles of new roads. This work was conducted in 42 counties on 57 blocks of State Game Lands, aggregating 323,438 acres. A total of 1,135 men, supplied and paid by the Civil Works' Administration, worked 272,949.5 man hours, for which they received \$146,697.58.

Driveable roads penetrating State Game Lands in strategic locations, augmented by a system of brushed out trails, are essential in provid-

ing protection from forest fires. One large fire in game territory will very likely result in greater loss to game than is occasioned by violations of the game laws in that same section over a period of many years. Some sportsmen have registered concern for game because the opening up of roads and trails make game lands more accessible. Protection against loss from forest fires should be their primary concern. Another point in favor of roads and trails, and one apparently given little thought, is that accessibility of all game territory lessens concentration of hunters in previously more limited accessible territory. Concentration of hunters results in overshooting of game and unquestionably is the cause of many hunting accidents. Establishment of more game refuges should, of course, go hand in hand with the opening up of heretofore inaccessible areas.

## CIVILIAN CONSERVATION CORPS CAMPS

During 1933 six Civilian Conservation Corps Camps of about 225 men each were set up on the larger blocks of State Game Lands, as follows:

Camp No. 101 on State Game Lands Nos. 44 and 54 in Elk and Jefferson Counties.

Camp No. 102 on State Game Lands No. 57 in Wyoming County.

Camp No. 103 on State Game Lands No. 12 in Bradford County.

Camp No. 104 on State Game Lands No. 13 in Sullivan County.

Camp No. 105 on State Game Lands No. 61 in McKean County.

Camp No. 106 on State Game Lands No. 74 in Clarion County.

Camp No. 106 was removed in April, 1934. The primary purpose of the Federal Government in creating the Civilian Conservation Corps was to take unemployed boys out of towns and cities and give them healthful employment in the woods, and thus make better citizens of them. The Game Commission's objective, in addition to its desire to cooperate in this worthy purpose, was to get strategic fire protection roads constructed on game lands.

## BUILDINGS AND CONSTRUCTION

In connection with the primary refuge system twenty-four refuge keepers and their families regularly occupied dwellings owned and maintained by the Game Commission. Other refuge keepers resided in privately-owned homes and received a proportionally higher salary. Eight other buildings on State Game Lands are used as temporary camps by law-enforcing officers of the Game Commission.

All of the twenty-four regularly occupied dwellings are equipped with heating plant, bathroom, running water and septic tank for sewage disposal. All buildings are kept in good repair in accordance with the standard for all State buildings.



Standard Type "A" barns, 19 feet by 32 feet, were constructed on State Game Lands Number 12 in Bradford County and State Game Lands Number 29 in Warren County, for use of refuge keepers. Two additions, each 10 feet by 44 feet, were attached to the dwelling on State Game Lands Number 54 in Jefferson County. This building has been used jointly as the residence of the refuge keeper and as the Game Protector's Training School. The additions provided shower baths and locker rooms, and enlarged sleeping quarters. An electric service line was constructed from a commercial line a distance of about two miles to the training school.

A new bridge, 14 feet by 15 feet, with 10 feet wing walls, was constructed across Lynn Run, in Westmoreland County, to the refuge keeper's headquarters. Napped stone roads were constructed with the aid of CWA workers to the refuge keeper's headquarters on State Game Lands Number 39 in Venango County and Number 33 in Centre County, each a distance of about one-half mile.

Wells to supply water for refuge keepers' dwellings were drilled at Number 8 in Lycoming County, Number 12 in Bradford County and Number 29 in Warren County. Electric lighting plants were installed in the refuge keeper's headquarters at Number 5 in Westmoreland County and Number 34 in Clearfield County. Septic tanks were installed for Number 13 in Sullivan County, Number 15 in Potter County and Number 54 in Jefferson County. Water pumps for refuge keepers' dwellings were installed at Number 54 in Jefferson County and Number 12 in Bradford County. Dwellings at Number 5 in Westmoreland County and Number 15 in Potter County were reroofed. A bathroom was installed in the training school on Number 54 in Jefferson County.

The exterior of buildings for the following refuge keepers' headquarters were painted:

Number	1	Clinton County
"	4	Perry County
"	5	Westmoreland County
"	8	Lycoming County
"	14	Cameron County
"	24	Forest County
"	32	Huntingdon County
"	35	Susquehanna County
"	39	Venango County

Interior painting and papering was done for the following:

Number	1	Clinton County
"	3	Franklin County
"	5	Westmoreland County
"	23	Huntingdon County
"	24	Forest County
"	25	Elk County
"	26	Blair County
"	33	Centre County
"	39	Venango County



Expenditures for new buildings during the biennium amounted to \$6,535.77, as against \$12,860.14 for the previous biennium. Maintenance of buildings for this biennium amounted to \$7,650.69. The estimated value of buildings used in connection with the primary game refuge system, owned by the Game Commission, is \$164,555.00.

## PLANTING TREES

263,250 forest tree seedlings, 3,000 barberry plants and 1,000 Morrow's honeysuckles were planted on State Game Lands and Refuges to provide food and cover for game. The largest proportion of this planting was accomplished by men from CCC Camps in the spring of 1934. Realizing that clearings in the woods are decidedly advantageous to many species of game, particular care is used not to plant all of these clearings. The policy followed is to plant evergreen species in clumps or groups to provide birds and game animals a place of refuge from hawks, owls, etc. Food-bearing species are scattered over as wide an area as possible.

One thousand Asiatic chestnuts, accredited as being immune from the chestnut blight, were secured from the United States Department of Agriculture, Bureau of Plant Industry, in 1930 and planted on State Game Lands No. 49 in Fulton and Bedford Counties in a wire enclosure. The severe drought during that summer was more or less disastrous to this experimental planting. However, a check-up in the spring of 1934 disclosed that twenty-five per cent of the original number were still living.

## FOREST FIRES

Officers of the Game Commission devoted 567 hours in cooperation with the Department of Forests and Waters in extinguishing forest fires.

As a reminder to the hunters of the state that forest fires are destructive to game, a new forest fire poster, in colors, depicting a turkey fleeing from a fire, was published. 10,000 copies were distributed and placed in stores, post offices, hunting camps, assembly rooms of sportsmen's clubs, etc.

Lands under the jurisdiction of the Game Commission which were damaged by forest fires are summarized as follows:

State Game Lands .....	2,754 acres
Primary Game Refuges .....	424 "
Auxiliary Game Refuges .....	105 "
Lands Under Contract for Purchase .....	200 "

## DEER PROOF FENCES

Under authority contained in the Act of June 2, 1923, P. L. 489, as amended in 1925, the Game Commission may furnish deer proof fences to protect farms, orchards and commercial truck patches where material damage to crops by deer can be shown.

The open season on antlerless deer in 1931 apparently had a beneficial effect insofar as deer damage was concerned, as evidenced by the fact that fewer applications for deer proof fences were submitted during this biennium as compared to previous years. A total of 9,072 rods of fencing and necessary staples were furnished 46 applicants in 24 counties at a cost of \$11,496.84, paid from the Game Fund. The greatest number of approved applications were in Luzerne County, with Carbon County next high.

## CONTROL OF VERMIN

During the biennium 1933-1934 more predators were presented to the Division of Predatory Animals for bounty than during any other two-year period in the history of the Game Commission. Owing to widespread unemployment more men were engaged in hunting and trapping vermin than ever before.

During the biennium 1931-1932 trapping slowed up, owing to the extremely low value of fur. This left more adult animals at large to breed and a greater number available for the biennium 1933-1934.

A statement of bounty paid during the two years is as follows:

	1932-1933	1933-1934
Wild Cats .....	211	181
Gray Foxes .....	9,392	9,337
Weasels .....	78,656	88,578
Goshawks .....	64	68
Number of Claims .....	35,370	40,679
Amount of money paid .....	\$119,709	\$128,981

The amount paid during the prior biennium was 1930-1931—\$84,098; 1931-1932—\$75,347.

## EXPERIMENTAL DEER PARK

The deer breeding experiment at Pine Grove Furnace, established in 1930, is being continued and valuable information secured. This project is being carried on to determine the proper sex ratio for deer.

## FRAUDULENT BOUNTY CLAIMS

During the past two years 28 cases of attempted bounty fraud were prosecuted and \$2,800 in fines collected. In addition, 38 attempts were frustrated and the payment of bounty refused, but owing to the extreme poverty of the defendants, no penalties were imposed.

## BEAVER CONTROL

During the biennium 470 complaints of damage by beaver were received and 800 beaver were live trapped to relieve the situation. Ninety-two of these animals were sold or exchanged for other game to other states for stocking purposes, five were shipped to Old Mexico and one pair to Germany, where they arrived safely.

## BEAVER SEASON

Beaver under continued protection for many years became very numerous and destructive to property and were also destroying their own food supply.

An open season was declared by resolution of the Board effective March 1, 1934, to April 10, 1934, during which 6,455 beaver were legally taken by the resident trappers of the State and sold at an average of \$9.00 each.

Ninety per cent of these pelts were purchased by local Pennsylvania Fur Dealers. Few violations of the terms of the resolution occurred. A sufficient number of beaver remain in all sections of the State where these animals will thrive to repopulate the entire area. It is thought that another open season will be necessary in the near future to keep them under proper control.

## TRAPPING GAME AND FUR BEARING ANIMALS TO RELIEVE PROPERTY DAMAGE

Gray squirrels became so numerous in sections of Montgomery, Delaware and Philadelphia Counties that they became a nuisance. Over 500 of these animals were trapped and transferred to more suitable locations.

A number of cases of damage to private property by muskrats were reported and the animals trapped and transferred to other locations.

## FUR BEARING ANIMAL REPORT

A tabulation of the fur dealer's reports for the year 1932-33 gives the following estimate of the annual catch and value of fur-bearers in Pennsylvania:

	<i>No. of Pelts</i>	<i>Average Price</i>	<i>Total Value</i>
Muskrats .....	427,126	@ .35	\$149,494.10
Skunks .....	384,302	@ .49	188,307.98
Opossum .....	175,964	@ .23	40,471.72
*Weasels .....	78,656	@ .25	19,664.00
Raccoons .....	27,424	@ 1.90	52,105.60
Mink .....	13,620	@ 3.25	44,265.00
*Gray Fox .....	9,392	@ 1.61	15,121.12
Red Fox .....	5,272	@ 3.09	16,290.48
*Wild Cats .....	211	@ .70	147.70
	<hr/> 1,121,967		<hr/> \$525,867.70

\* Taken from bounty statement.



## EDUCATION

The desire on the part of the people of Pennsylvania to know more about wild life and what is being done to perpetuate the desirable species and control the undesirable is becoming so great it taxes the efforts of the Game Commission to comply with all their requests for information. During the past two years it was necessary to employ an additional lecturer for this purpose, but even with this added assistance as well as that of Members of the Board, the Executive Secretary and other employes of the Commission, it was impossible to meet the demand. A total of 1,564 meetings were attended reaching over 477,000 persons. Sportsmen's associations, of which there are over 700, constituted the principal gatherings, although many schools, colleges, Scouts, bird and nature clubs, civic organizations, etc., also were attended.

The most outstanding educational program the Commission ever attempted began in January, 1933, at which time there was placed on the road an unusual Environmental Wild Life Exhibit. This exhibit visited ten major cities or towns throughout the state that year, reaching a total of 527,803 persons.

Sportsmen's organizations in each case sponsored the appearance of the exhibit in their community, and as a result most of them benefited thereby both financially and in increased membership.

So great was the response to this new type of visual education that when the Commission decided to continue it during 1934 they were besieged with requests. That year a slightly larger itinerary was prepared and twelve places visited, reaching a total of 797,639 persons.

During the summer of 1933 two small exhibits of live wild animals attended 25 Boy Scout Camps, reaching 5,390 of these young men. In the summer of 1934 similar exhibits were presented at ten major field gatherings of sportsmen, reaching about 20,000. This type of exhibit was also very favorably received.

Another very important phase of the Commission's educational program, the motion picture program, was furthered by the employment of a professional photographer. As a result, the department added ten new reels during the past two years, and in addition greatly increased its library of still photographs.

Films in both 16mm and 35mm size were prepared and during the biennium these were loaned to 572 gatherings and reached 210,094 persons.

Each member of the lecture staff, which now numbers three, is equipped with a complete 16mm portable projector and screen and a full series of about 20 films.



All sources of publicity were used as widely as possible, including the press, radio, national periodicals, etc.

THE PENNSYLVANIA GAME NEWS, official monthly publication of the Game Commission, which is distributed on a subscription basis of fifty cents per year, has increased greatly its circulation and is accomplishing its aim, to keep the sportsmen constantly informed of the activities of the Commission.

## RESEARCH

The Bureau of Protection has long needed a method of infallibly distinguishing even canned venison from other meats. We have found a particular method of anaphylaxis that seems to meet this long felt need. We are having extensive check tests made in the biological laboratories of the University of Pennsylvania, and so far the method has met all these tests entirely satisfactorily. Particular care has been given to develop a method that will not merely satisfy a chemist or a biologist, but one that will be practical and convincing in a jury trial.

In collaboration with experts from the Bureau of Entomology at Washington and the U. S. Biological Survey, a thorough and extensive investigation was made during the recent open season on beaver to determine both the internal and external parasites of beaver and to find if our beaver were affected with any serious disease.

Research was made at the same time to discover something more definite as to the average litter of beaver under present Pennsylvania conditions, and we found the average much larger than previously given. Six and seven to the litter was quite common, and litters of even eight and nine were found occasionally.

## HUNTING ACCIDENTS

During this biennium, as in other years, the Board of Game Commissioners continued its educational program through the press, the radio, by lecture and motion pictures, calling attention to the danger in the careless handling of firearms. It is our firm belief that sportsmen generally are giving more consideration to the proper use of firearms than ever before. While conditions have improved greatly, unfortunately we still have too many persons (and this is a condition not only confined to hunting) who have no regard for the safety of others, or even of themselves. The table below indicates the trend in hunting accidents.

	1928	1929	1930	1931	1932	1933
<i>Self Inflicted</i>						
Fatal .....	25	32	23	30	18	12
Non-Fatal .....	64	77	77	97	83	55
<i>Inflicted by Others</i>						
Fatal .....	20	24	36	42	36	19
Non-Fatal .....	174	199	214	270	192	197

Considering the number of hunters afield, there were less accidents during 1933 than during any year since the enactment of the Hunters License Law, in 1913.

There were 9 fatal accidents during the 1933 season while hunting deer, and the dates on which they occurred are as follows: Dec. 1, 4; Dec. 2, 1; Dec. 4, 1; Dec. 9, 1; Dec. 14, 1, and Dec. 15, 1.

Data collected on these accidents show the approximate distance from which shots were fired was 50 feet.

Information collected on non-fatal accidents while hunting deer shows accidents occurred as follows: Dec. 1, 9; Dec. 2, 2; Dec. 4, 3; Dec. 6, 2; Dec. 7, 4; Dec. 8, 3; Dec. 9, 2; Dec. 11, 2; Dec. 12, 2; and Dec. 13, 1; or a total of 30. The average distance from which shots were fired was 45 feet.

The Game Commission advocates wearing plenty of *red* as a matter of protection. Information collected on fatal and non-fatal accidents for which other hunters were responsible indicate that this is a safety feature which should be practiced by every hunter going afield in quest of either small or large game.

## GAME KILLED IN PENNSYLVANIA

Despite record kills during past years, the sportsmen continue to enjoy excellent bags, as shown in the tabulation following:

	Wt. of Ea.	Season of 1932		Season of 1933	
		Number	Weight	Number	Weight
Elk -----	450 lbs.	0	0 lbs	0	0 lbs.
Deer, Legal Males -----	120 "	19,724	2,366,880 "	20,480	2,457,600 "
Deer, (Antlerless) -----	90 "	0	0 "	0	0 "
Bear -----	200 "	216	43,200 "	586	117,200 "
Rabbits -----	2 "	3,126,512	6,253,024 "	2,290,426	4,580,852 "
Hares (Snowshoes) -----	4 "	19,890	79,560 "	23,139	92,556 "
Squirrels -----	1 "	590,128	590,128 "	687,837	687,837 "
Raccoons -----	12 "	31,772	381,264 "	30,943	371,316 "
Wild Turkeys -----	12 "	2,992	35,904 "	3,510	42,120 "
Ruffed Grouse -----	1 1/2 "	134,135	201,203 "	164,285	246,428 "
Ringnecked Pheasants -----	3 1/2 "	246,551	924,567 "	297,751	1,116,566 "
Bobwhite Quail -----	6 oz.	129,564	48,587 "	157,667	59,125 "
Woodcock -----	6 "	27,141	10,178 "	30,570	11,464 "
Shorebirds -----	6 "	12,594	4,823 "	10,859	4,072 "
Blackbirds -----	3 "	174,362	32,693 "	121,845	22,846 "
Wild Waterfowl -----	3 lbs.	25,431	76,293 "	17,421	52,263 "
Total Weight -----			11,048,304 lbs.		9,862,245 lbs.
Reduced to tons, equals -----			5,524 tons		4,931 tons

ANTLER CLASSIFICATION:	1932	1933
Two points to 1 antler -----	3,364—17%	4,172—20%
Three points to 1 antler -----	4,575—23%	5,075—25%
Four or more points to 1 antler -----	11,785—60%	11,233—55%

Due to the limited number of elk in the Commonwealth, it was deemed advisable to close the season indefinitely on these animals.

The three-day open season for the killing of antlerless deer in 1930 in twenty-three counties on the basis of eight special licenses for each legal male deer killed the previous year, and the general open season in 1931, when either a legal male or antlerless deer could be taken, resulted in a more proper adjustment of the sex ratio, therefore it was unnecessary to declare the state or any part thereof open to the killing of antlerless deer during the two-year period covered by the report.

## SPECIAL GAME LICENSES

During the period covered by this report the law governing the issuing of special game licenses remained unchanged, and as a result there was not much variation in the number of licenses issued in this period as against the previous biennium. However, economic conditions and the fur market are responsible in a measure for an increase or decrease in the number of Game Propagating and Fur Dealer's Licenses sold during any period.

The table below gives the number of licenses issued.

<i>Fiscal Year</i>	<i>Taxider- mist</i>	<i>Ferret Owners</i>	<i>Ferret Breeder</i>	<i>Pro- pa- gating</i>	<i>Field Trial Permits</i>	<i>Collect- ing</i>	<i>Fur Farm- ing</i>	<i>Fur Dealers</i>
1932-33 ...	298	35		482	3	16	79	397
1933-34 ...	266	42		529	6	17	52	469

## HUNTING LICENSES

The Department of Revenue, by Act of the General Assembly, is charged with the responsibility of directing the issuance of hunting licenses, settlement of accounts with the issuing agents and the transmission of all funds arising from this source to the State Treasurer for deposit to the credit of the Game Fund.

The main source of revenue credited annually to the Game Fund is from the sale of resident and non-resident licenses, and the number of licenses issued during the past four years are given below for comparison:

<i>Year</i>	<i>Resident</i>	<i>Non-Resident</i>	<i>Alien Non-Resident</i>
1930 .....	530,392	6,009	0
1931 .....	572,779	8,964	3
1932 .....	537,451	5,251	1
1933 .....	524,337	4,966	0

According to a tabulation made by the Department of Revenue, non-residents from twenty-six states were issued licenses during 1932, as follows: New York, 1919; Ohio, 1563; New Jersey, 1130; West Virginia, 184; Maryland, 182; Indiana, 94; Delaware, 47; District of



Columbia, 29; Illinois, 22; Kentucky, 21; Massachusetts, 13; Virginia, 13; Connecticut, 9; North Carolina, 5; Tennessee, 3; Rhode Island, 3; Missouri, 2; Georgia, 2; Oklahoma, 2; Maine, 2; Vermont, 1; Michigan, 1; California, 1; Oregon, 1; Florida, 1; Texas, 1.

This record further attests the fact that Pennsylvania is among the leading states in game conservation.

## STATUS OF FUNDS

There are appended to this report detailed statements of revenue and disbursements, as well as a financial chart, covering this biennium.

The average sportsman realizes that his voluntary contribution of \$2.00 annually for a Resident Hunter's License has helped materially to bring Pennsylvania from a condition described by many as "a shot-out" State forty years ago to its present position, where it ranks among the leaders in game conservation. However, when the person who is not interested in hunting is apprised of the fact that the sportsmen of Pennsylvania contribute over \$1,000,000 annually to perpetuate their sport, and that in turn they take game worth over \$10,000,000, not to mention the value of raw furs taken and the various lines of business which are increased by millions yearly as a direct result of hunting, he is really amazed.

The Board of Game Commissioners, contrary to the belief of many, does not receive an appropriation with which to carry on its work, but it operates entirely upon the money contributed in the form of a license fee by the citizens of Pennsylvania who desire to hunt. This is as it should be. Why should a citizen who has no interest in hunting be asked to pay part of the bill?

Respectfully submitted,

ERNEST E. HARWOOD,  
*Executive Secretary.*



# STATEMENT OF REVENUE AND DISBURSEMENTS—BOARD OF GAME COMMISSIONERS FISCAL YEAR JUNE 1, 1932 TO MAY 31, 1933

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## REVENUE

Balance in State Treasury to Credit of "Game Fund" June 1, 1932	\$786,341.11
Less: Unwarranted Requisitions chargeable to year ending May 31, 1932	54,992.84
Balance in Treasury Department after above requisitions were paid	\$731,348.27
Net Revenue from Hunters' Licenses	1,102,939.56
Penalties	44,434.46
Special Licenses	11,356.10
Interest on Deposits	18,888.20
Miscellaneous Revenue	5,021.87
Amount Credited to Game Fund During Year	1,182,640.19
Total Available	\$1,913,988.46

## DISBURSEMENTS

	General Office	Game Purchases and Propagation	Protection	Refuges and Lands	Predatory Animals	Education	Total
Salaries	\$28,842.50	\$12,673.26	\$151,803.16	\$63,908.54	\$15,000.00	\$10,164.37	\$282,391.83
Traveling Expenses of Salaried Employees	3,247.96	1,308.93	74,797.75	9,638.84	2,108.59	3,756.36	94,858.73
Deputy Game Protectors:							
Wages							
Expenses	\$68,347.35		108,390.61				108,390.61
Wages:							
Labor Cutting Fire, Refuge and Boundary Lines, Road Repairs, Planting Trees, etc.			22,036.01				22,036.01
Labor at Game Farms, Feeding Game and Miscellaneous Work	1,207.43	22,298.33	1,814.91		1,409.35	2,736.13	29,466.15
Purchase of Game		62,961.45					62,961.45
Feed for Game		5,189.14	10,672.90	474.62	309.80	163.48	16,809.94
Express on Game		17,103.19	108.77				17,211.96
Express and Cartage	52.23	457.05	529.77	107.87	145.51	114.31	1,406.74
Purchase of State Game Lands, (title examinations and cost of surveys included)							
Fixed Charges in Lieu of Taxes		88.72		250,422.20			250,422.20
Buildings and Construction by Contract		2,613.83	490.29	15,943.03			16,051.75
Buildings and Construction other than by Contract		18,773.74		2,983.50			6,087.62
Repairs to Buildings, Grounds and Equipment by Contract	77.37	157.73	47.60	1,763.31	54.13	58.22	2,158.36
Equipment at Office, Game Farms, Game Refuges, etc.	1,146.93	14,802.09	1,006.57	3,104.30	407.98	492.77	20,939.64
Miscellaneous Supplies	1,479.06	4,814.80	6,045.47	9,051.39	2,769.87	1,881.86	26,042.45

## DISBURSEMENTS—Continued

	General Office	Game Purchases and Propagation	Protection	Refuges and Lands	Predatory Animals	Education	Total
Motor Supplies Including Gas, Oil, Tires, Repairs, etc.	877.77	632.76	4,629.26	1,952.82	1,748.45	864.53	10,705.59
Light, Power and Fuel		998.92	6.00			3.90	1,008.82
Insurance, Surety and Fidelity Bonds	306.77	336.59	1,177.04	745.05	576.44	112.29	3,254.18
Postage	4,826.90	34.34	1,520.40	226.35	3,012.83	1,213.89	10,534.71
Telephone and Telegrams	1,100.09	269.54	6,163.65	1,393.42	68.85	50.35	9,045.90
Rentals Including Monthly Auto Storage, Road Machinery, Equipment, etc.	7.50	27.20	583.44	1,343.80	560.00	513.95	3,035.89
Bounty Claims (\$119,715.00 (1932-33) plus Net Adjustment \$593.00)					120,308.00		120,308.00
Advancement Account					51,964.33*		51,964.33*
Return of Fines Collected and Deposited			2,402.50				2,402.50
Fees:							
Attorneys			300.00				300.00
Medical, Taxidermy, etc.	.75	25.00	188.65	20.00	25.00	293.00	552.40
Deer Proof Fence	5,671.21						5,671.21
Damage by Bears	423.00						423.00
Live Stock							
Horse Feed at Refuges				210.00		75.00	285.00
Other Maintenance Services and Expenses	138.41	641.39		161.00			641.39
Newspaper Advertising	467.57		198.10		3.61		968.69
Printing, Binding and Paper	3,207.59		182.41	199.58			3,589.58
Printing, Hunters' Licenses, Tags and Misc. Forms (through Department of Revenue)	2,992.73	42.90	753.62	863.93	468.34	7,392.08	12,513.00
	5,126.30						5,126.30
Totals	\$80,732.50	\$166,077.08	\$873,811.27	\$387,190.95	\$97,012.42	\$29,886.79	\$1,114,711.01
Balance in "Game Fund" at Close of Business May 31, 1933							\$799,277.45
* Deducted from Expenditures and Refunded to "Game Fund" as Balance in Advancement Account May 31, 1933.							
Balance in Treasury Department to Credit of "Game Fund" at Close of Business May 31, 1933							\$834,580.66
Less: Vouchers Included in Above Statement, in course of payment May 31, 1933 and subsequently paid							35,303.21
Less: Amount Standing to Credit of Refuges and Lands May 31, 1933 (major part of which covers land now under contract) balance to be subsequently committed							\$213,577.07
Less: All other Commitments							37,100.18
							350,737.25
Net Balance Available, at Close of Business May 31, 1933							\$448,540.20†
† Approximate Amount Required for Operating Expenses each Year after May 31, until Revenue from Sale of Licenses for the Current Year is Available.							

# STATEMENT OF REVENUE AND DISBURSEMENTS—BOARD OF GAME COMMISSIONERS

## FISCAL YEAR JUNE 1, 1933 TO MAY 31, 1934

### REVENUE

Balance in State Treasury to Credit of "Game Fund" June 1, 1933	\$834,580.66	
Less: Unwarranted Requisitions chargeable to year ending May 31, 1933	35,303.21	
Balance in Treasury Department after above requisitions were paid		\$799,277.45
Net Revenue from Hunters' Licenses	1,069,056.50	
Penalties	38,938.83	
Special Licenses	11,361.00	
Interest on Deposits	11,407.14	
Miscellaneous Revenue	3,901.34	
Amount Credited to Game Fund During Year		1,134,664.81
Total Available		\$1,933,942.26

### DISBURSEMENTS

	General Office	Game Purchases and Propagation	Protection	Refuges and Lands	Predatory Animals	Education	Total
Salaries	\$28,503.99	\$16,797.73	\$148,611.94	\$64,621.50	\$14,910.00	\$13,560.00	\$287,005.16
Traveling Expenses of Salaried Employees	4,454.26	2,778.22	73,112.60	12,890.29	2,355.18	3,890.48	99,481.03
Deputy Game Protectors:							
Wages							
Expenses			57,707.56				57,707.56
Wages:							
Labor Cutting Fire, Refuge and Boundary Lines, Road Repairs, Planting Trees, etc.				9,538.55			9,538.55
Labor at Game Farms, Feeding Game and Miscellaneous Work			1,669.67		1,898.10	2,598.55	34,602.91
Purchase of Game	2,731.40	25,705.19					41,309.40
Feed for Game		41,309.40					19,522.46
Express on Game		7,587.45	10,689.64	413.14	339.99	432.24	14,210.80
Express and Cartage		14,184.63	25.97	.20			2,686.72
Purchase of State Game Lands, (title examinations and cost of surveys included)	21.46	1,340.38	735.21	197.61	219.39	172.67	263,651.37
Fixed Charges in Lieu of Taxes		15,722.10		247,929.27			18,662.01
Buildings and Construction by Contract		88.72		18,573.29			8,701.32
Buildings and Construction other than by Contract		6,136.05	1,407.03	1,158.24			38,162.70
Repairs to Buildings, Grounds and Equipment by Contract		37,398.30	201.56	562.84			1,140.58
	52.54	31.95	33.70	979.74		42.65	



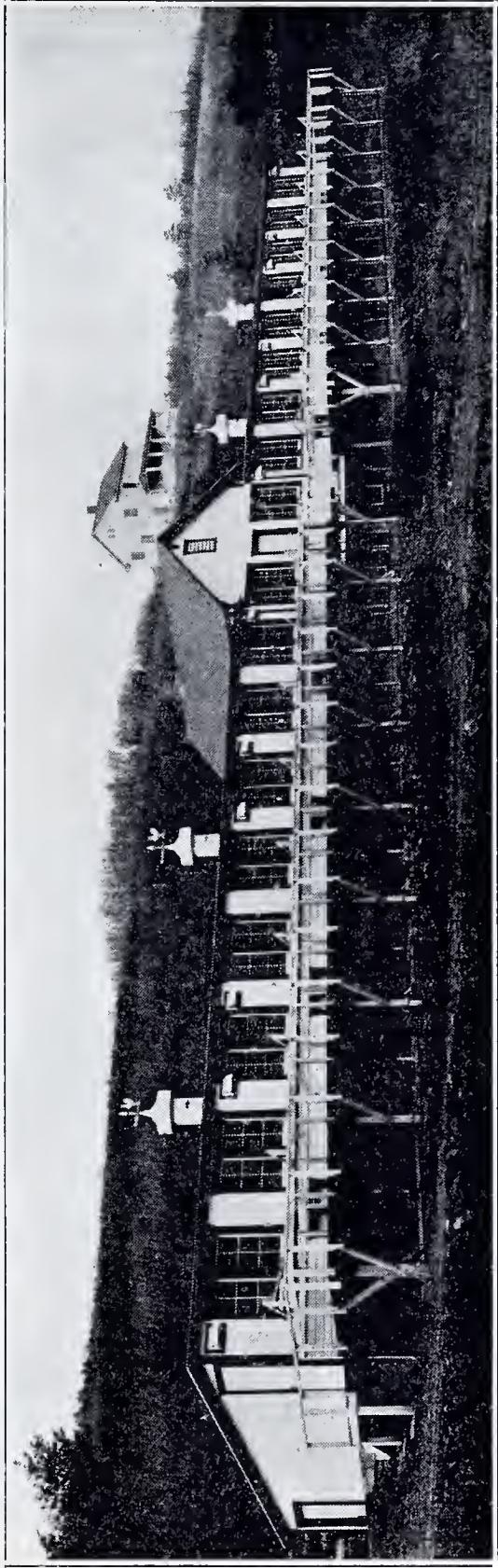
## DISBURSEMENTS—Continued

	General Office	Game Purchases and Propagation	Protection	Refuges and Lands	Predatory Animals	Education	Total
Equipment at Office, Game Farms, Game Refuges, etc.	862.31	8,458.75	625.81	1,701.25	154.25	724.47	12,526.84
Miscellaneous Supplies	743.53	5,256.31	1,470.45	7,628.39	2,375.70	1,520.92	18,995.30
Motor Equipment and Accessories:							
Passenger Cars	1,042.00		1,107.00	1,008.35			3,217.35
Trucks, Tractors, etc.		1,153.48		3,430.00			4,583.48
Motor Supplies Including Gas, Oil, Tires, Repairs, etc.	532.64	1,124.25	2,504.74	2,052.55	1,853.41	1,058.46	9,126.05
Light, Power and Fuel		2,502.24	25.31	193.15		21.90	2,722.60
Insurance, Surety and Fidelity Bonds	238.33	1,330.38	2,833.19	2,695.17	477.89	153.44	7,788.40
Postage	8,457.00	47.59	1,329.50	213.13	2,712.49	1,148.16	8,907.87
Telephone and Telegrams	1,003.94	439.57	6,428.40	1,437.93	60.07	92.63	10,002.54
Rentals Including Monthly Auto Storage, Road Machinery, Equipment, etc.		778.79	269.97	1,182.53	527.00	700.75	3,459.04
Bounty Claims (\$128,999.00 Less checks issued but not ac- counted for \$61.00 plus checks accounted for (1932-33) \$41.00)					128,979.00		128,979.00
Advancement Account (\$40,000, Less Refund (1932-33) \$54.00)					39,946.00		39,946.00
Return of Fines Collected and Deposited			2,072.50				2,072.50
Fees:							
Attorneys		.25	300.00				300.25
Medical, Taxidermy, etc.		21.00	153.82		120.18	131.00	680.68
Deer Proof Fence	53.00			201.68			5,825.63
Damage by Bears	5,825.63						636.30
Live Stock	636.30						405.00
Horse Feed at Refuges				400.00		5.00	954.26
Other Maintenance Services and Expenses				954.26			1,058.76
Newspaper Advertising	109.00	520.33	196.46	217.47	9.70	5.80	9,777.58
Printing, Binding and Paper	9,569.34		155.21	53.03			14,914.26
Printing Hunters' Licenses, Tags and Misc. Forms (through Department of Revenue)	1,252.93		5,716.18	1,121.81	635.28	6,188.06	31,367.00
Administering State Employees Retirement System (through Department of State)	31,367.00						12,410.00
Totals	1,125.00	665.00	6,190.00	3,200.00	750.00	480.00	\$1,227,119.26
Balance in "Game Fund" at Close of Business May 31, 1934	\$94,241.60	\$191,378.06	\$325,573.42	\$384,615.37	\$198,383.63	\$32,927.18	\$706,823.00



Balance in Treasury Department to Credit of "Game Fund" at Close of Business May 31, 1934	-----	\$727,772.90	
Less: Vouchers Included in Above Statement, in course of payment May 31, 1934 and subsequently paid	-----	20,949.90	
Less: Amount Standing to Credit of Refugees and Lands May 31, 1934 (major part of which covers land now under contract) balance to be subsequently committed	-----	\$322,542.78	\$706,823.00
Less: All other Commitments	-----	3,933.03	
	-----		326,475.81
Add: Department Advancement Account, on Deposit for Payment of Bounty Claims,	-----		\$280,347.19
	-----		40,000.00
Net Balance Available at Close of Business May 31, 1934	-----		\$420,347.19*

\* Approximate Amount Required for Operating Expenses each Year after May 31, until Revenue from Sale of Licenses for the Current Year is Available.



Large Modern Brooder House At State Wild Turkey Farm

**STATE GAME LANDS**  
**ACREAGE WITHIN RESPECTIVE COUNTIES.**

**MAY 31, 1934**

BUREAU OF  
 REFUGES AND LANDS

TABLE NUMBER 1

County	AREA (ACRES)			Number of Townships
	Acquired to May 31, 1932	Acquired Biennium 1932-1934	Total May 31, 1934	
Bedford -----	12,279.25	10,855.90	23,135.15	14
Berks -----	316.20	455.90	772.10	5
Blair -----	958.94	48.40	1,007.34	1
Bradford -----	32,000.00	741.40	32,741.40	6
Bucks -----	1,163.30	227.10	1,390.40	3
Butler -----		721.60	721.60	1
Cambria -----	2,320.75	2,789.80	5,110.55	3
Cameron -----	11,888.20		11,888.20	1
Carbon -----	1,548.80		1,548.80	1
Centre -----	12,565.70	3,583.60	16,149.30	5
Chester -----	735.20	170.60	905.80	1
Clarion -----	6,229.30	5,718.30	11,947.60	8
Clearfield -----	5,056.00	12,946.60	18,002.60	9
Clinton -----		9,545.70	9,545.70	2
Columbia -----	10,296.50	387.00	10,683.50	8
Crawford -----	1,790.10	1,361.40	3,151.50	3
Elk -----	43,600.55	266.00	43,866.55	7
Fayette -----	7,116.00		7,116.00	3
Forest -----	6,766.90	290.00	7,056.90	2
Franklin -----		2,095.20	2,095.20	1
Fulton -----	6,003.70	2,491.50	8,495.20	5
Huntingdon -----	2,300.70	3,127.00	5,427.70	6
Indiana -----		100.00	100.00	1
Jefferson -----	20,566.26	2,065.10	22,631.36	7
Juniata -----		180.10	180.10	1
Lackawanna -----		487.80	487.80	1
Lancaster -----	2,702.10	163.70	2,865.80	3
Lebanon -----		2,671.00	2,671.00	2
Luzerne -----		1,422.40	1,422.40	1
Lycoming -----	3,005.70	15,700.90	18,706.60	4
McKean -----	20,633.93		20,633.93	3
Monroe -----	4,878.73		4,878.73	4
Northumberland -----		3,728.50	3,728.50	3
Perry -----		1,772.60	1,772.60	2
Potter -----	12,173.20		12,173.20	5
Schuylkill -----		542.50	542.50	1
Somerset -----	1,484.70	1,283.70	2,768.40	3
Sullivan -----	35,484.90	4,424.00	39,908.90	6
Susquehanna -----	6,744.35		6,744.35	3
Tioga -----	4,038.32	103.40	4,141.72	3
Venango -----	11,142.68	1,963.60	13,106.28	8
Warren -----	8,718.51	8,901.90	17,620.41	5
Wayne -----	2,035.80	242.80	2,278.60	1
Westmoreland -----	4,606.00		4,606.00	1
Wyoming -----	16,990.50	2,104.80	19,095.30	3
York -----		751.20	751.20	2
Totals 46 Counties -----	320,141.77	106,433.00	426,574.77	168

**STATE GAME LANDS**  
**ACREAGE COVERED YEARLY AND COST**  
**MAY 31, 1934**

BUREAU OF  
 REFUGES AND LANDS

TABLE NUMBER 2

Year	Area (Acres)		Cost	
	Conveyed During The Year	Total Acquired To End Of Year	Conveyed During The Year	Total To End Of Year
<b>Calendar Year</b>				
1920 -----	9,714.55	9,714.55	\$27,589.02	\$27,589.02
1921 -----	28,403.66	38,118.21	76,503.00	104,092.02
1922 -----	5,293.40	43,411.61	11,339.30	115,431.32
<b>Fiscal Year</b>				
1923-24 -----	11,780.43	55,192.04	40,251.13	155,682.45
1924-25 -----	30,827.23	86,019.27	88,343.47	244,025.92
1925-26 -----		86,019.27		244,025.92
1926-27 -----	6,621.35	92,640.62	40,913.10	234,939.02
1927-28 -----	9,900.75	102,541.37	39,746.26	324,685.28
1928-29 -----	42,865.93	145,407.30	171,493.43	496,178.71
1929-30 -----	23,144.10	173,551.40	120,680.53	616,859.24
1930-31 -----	69,837.10	243,388.50	266,394.32	883,253.56
1931-32 -----	76,753.27	320,141.77	288,008.79	1,171,262.35
1932-33 -----	44,630.70	364,772.47	167,195.45	1,338,457.80
1933-34 -----	61,802.30	426,574.77	202,573.37	1,541,031.17



Releasing A Raccoon



**STATE GAME LANDS**  
**ACREAGE IN VARIOUS BLOCKS AND COST**  
**MAY 31, 1934**

**BUREAU OF**  
**REFUGES AND LANDS**

TABLE NUMBER 3

Serial Number Of Lands	County	Acquired to May 31, 1932		Acquired Biennium June 1, 1932 to May 31, 1934		Total acquired to May 31, 1934	
		Acres	Cost	Acres	Cost	Acres	Cost
12	Bradford	21,576.70	\$58,967.90	151.50	\$454.50	21,728.20	\$59,422.40
13	Sullivan	31,189.00	101,323.05	4,352.50	13,107.70	35,541.50	114,430.75
14	Cameron	11,888.20	32,518.38			11,888.20	32,518.38
24	Forest-Clarton	6,743.00	40,397.30	1,556.90	7,228.93	8,299.90	47,626.23
25	Elk	6,288.55	17,293.52			6,288.55	17,293.52
26	Bradford-Blair-Cambria	8,228.34	32,111.05	881.40	2,203.50	9,109.74	34,314.55
28	Elk-Forest	9,142.70	22,856.67			9,142.70	22,856.67
29	Warren	8,718.51	23,085.03			8,718.51	23,085.03
30	McKean	11,572.03	27,106.30			11,572.03	27,106.30
31	Jefferson	3,901.36	10,722.78			3,901.36	10,722.78
33	Centre	8,538.00	23,429.25	1,307.10	3,921.30	9,845.10	27,350.55
34	Clearfield-Elk	8,800.00	26,400.00			8,800.00	26,400.00
35	Susquehanna	6,714.35	41,651.10			6,714.35	41,651.10
36	Bradford	11,456.60	32,366.69	661.40	1,916.15	12,118.00	34,282.84
37	Tioga	4,038.32	11,629.25	103.40	232.65	4,141.72	11,861.90
38	Monroe	4,878.73	29,086.50			4,878.73	29,086.50
39	Venango	6,504.98	39,148.62	587.60	2,872.92	7,092.58	42,021.54
40	Carbon	1,548.80	6,145.00			1,548.80	6,145.00
41	Bedford	1,568.00	3,136.00			1,568.00	3,136.00
42	Westmoreland	4,606.00	22,893.00			4,606.00	22,893.00
43	Chester-Berks	952.00	9,520.00			952.00	9,520.00
44	Elk-Jefferson	24,074.10	85,634.90	170.60	1,706.00	24,244.70	87,340.90
45	Venango	3,071.70	19,129.80			3,071.70	19,129.80
46	Lancaster	1,738.10	9,975.00	21.70	217.00	1,759.80	10,192.00
47	Venango	2,060.00	6,583.50			2,060.00	6,583.50
48	Bedford	4,080.40	10,837.41			4,080.40	10,837.41
49	Bedford-Fulton	2,183.40	7,859.03	954.80	2,783.55	3,138.20	10,642.58
50	Somerset	1,484.70	7,423.50			1,484.70	7,423.50
51	Fayette	7,116.00	35,880.90			7,116.00	35,880.90
52	Lancaster-Berks	1,063.40	7,449.30	361.60	2,417.20	1,425.00	9,866.50
53	Fulton	2,467.90	8,818.95	1,826.80	5,452.20	4,294.70	14,271.15



54	Jefferson-Elk	17,985.90	105,768.40	739.10	2,513.00	18,725.00	108,279.40
55	Columbia	1,800.20	5,403.80			1,800.20	5,403.80
56	Bucks	1,163.30	11,007.90	227.10	2,271.00	1,390.40	13,278.90
57	Wyoming	16,960.50	50,640.00	2,104.80	4,409.60	19,065.30	55,049.60
58	Columbia	8,496.30	25,654.20	387.00	1,161.00	8,883.30	26,815.20
59	Potter-McKean	6,636.20	19,468.10			6,636.20	19,468.10
60	Centre	4,027.70	10,069.25			4,027.70	10,069.25
61	McKean	8,142.20	25,789.97			8,142.20	25,789.97
62	McKean	520.50	1,685.40			520.50	1,685.40
63	Clarion	2,770.40	16,622.40			2,770.40	16,622.40
64	Potter	5,916.20	17,748.60			5,916.20	17,748.60
65	Fulton	3,034.60	12,138.40			3,034.60	12,138.40
66	Sullivan	3,292.60	7,987.10			3,292.60	7,987.10
67	Huntingdon	976.70	2,441.75	201.00	502.50	1,177.70	2,944.25
68	Lycoming	3,005.70	13,631.90			3,005.70	13,631.90
69	Crawford	1,790.10	8,950.50	514.80	2,553.37	2,304.90	11,503.87
70	Wayne	2,035.80	9,453.00	242.80	1,214.00	2,278.60	10,667.00
71	Huntingdon	1,324.00	3,310.00	687.40	1,718.50	2,011.40	5,028.50
72	Clarion	2,019.00	12,114.00			2,019.00	12,114.00
73	Bedford			10,014.20	32,556.49	10,014.20	32,556.49
74	Clarion-Jefferson			6,043.40	36,260.40	6,043.40	36,260.40
75	Lycoming			15,700.90	45,187.75	15,700.90	45,187.75
76	Franklin			2,095.20	6,285.60	2,095.20	6,285.60
77	Clearfield			3,038.00	7,595.00	3,038.00	7,595.00
78	Clearfield			720.70	2,702.63	720.70	2,702.63
79	Cambria			2,059.20	7,594.30	2,059.20	7,594.30
80	Lebanon-Berks-Schuylkill			2,907.30	14,347.50	2,907.30	14,347.50
81	Huntingdon			617.80	1,006.70	617.80	1,006.70
82	Somerset			1,283.70	3,851.10	1,283.70	3,851.10
83	York			751.20	6,885.60	751.20	6,885.60
84	Northumberland			4,271.00	12,813.00	4,271.00	12,813.00
85	Crawford			846.60	4,233.00	846.60	4,233.00
86	Warren			8,901.90	29,809.00	8,901.90	29,809.00
87	Clearfield			1,123.80	3,933.30	1,123.80	3,933.30
88	Perry			1,952.70	5,925.30	1,952.70	5,925.30
89	Clinton			9,545.70	28,637.10	9,545.70	28,637.10
90	Clearfield			2,338.60	7,015.80	2,338.60	7,015.80
91	Lackawanna-Luzerne			1,910.20	5,730.60	1,910.20	5,730.60
92	Centre			2,276.50	9,106.00	2,276.50	9,106.00
93	Clearfield			4,717.10	18,868.40	4,717.10	18,868.40
94	Clearfield			1,008.40	3,025.20	1,008.40	3,025.20
95	Butler			721.60	3,608.00	721.60	3,608.00
96	Venango			1,376.00	6,821.20	1,376.00	6,821.20
97	Bedford			2,170.00	5,103.28	2,170.00	5,103.28
Totals		320,141.77	\$1,171,262.35	106,433.00	\$369,763.82	426,574.77	\$1,541,031.17

**PRIMARY STATE GAME REFUGES  
LOCATED ON STATE GAME LANDS AND STATE FORESTS  
MAY 31, 1934**

BUREAU OF  
REFUGES AND LANDS

TABLE NUMBER 4

Name and Serial Number	County	Location of Refuge  Designation of Lands	Year Estab- lished	Acreage	
				In Refuge	Public Hunting Grounds
Penrose 1	Clinton -----	Sproul State Forest -----	1905	2,002.0	*
Kennedy 2	Clearfield -----	Moshannon State Forest ----	1906	3,107.0	*
3	Franklin -----	Mont Alto State Forest ----	1906	1,989.9	*
4	Perry -----	Tuscarora State Forest -----	1911	1,864.0	*
Phillips 5	Westmoreland -----	Forbes State Forest -----	1911	1,740.0	*
6	Centre -----	Bald Eagle State Forest ----	1912	1,265.8	*
7	Potter-Clinton-Lycom- ing -----	Tiadaghton State Forest ---	1915	2,460.0	*
8	Lycoming -----	Tiadaghton State Forest ---	1915	1,785.0	*
9	Huntingdon -----	Logan State Forest -----	1915	2,646.0	*
11	Lackawanna -----	Lackawanna State Forest --	1915	2,774.0	*
12	Bradford -----	State Game Lands No. 12 --	1915	2,106.0	19,622.20
Donaldson 13	Sullivan -----	State Game Lands No. 13 --	1915	3,027.0	32,514.5
Kelley 14A	Cameron -----	State Game Lands No. 14 --	1915	1,865.0}	9,814.2
14B	Cameron -----	State Game Lands No. 14 --	1933	209.0}	
15	Potter -----	Susquehannock State Forest	1916	3,434.0	*
16	Tioga -----	Tioga State Forest -----	1916	3,970.0	*
17	Potter -----	Elk State Forest -----	1916	2,802.0	*
18	Mifflin-Juniata -----	Rothrock State Forest -----	1916	2,900.0	*
19-U.S.A. 20	Forest -----	Allegheny National Forest --	1933	400.0	*
21	Bedford -----	Buchanan State Forest -----	1917	2,196.0	*
22	Dauphin -----	Weiser State Forest -----	1918	1,849.0	*
23	Union-Centre -----	Bald Eagle State Forest ----	1918	2,130.0	*
24	Huntingdon -----	Rothroe State Forest -----	1918	1,896.0	*
25	Forest -----	State Game Lands No. 24 --	1918	1,560.0	6,739.9
26	Elk -----	State Game Lands No. 25 --	1920	2,096.0	4,192.55
27	Bedford-Blair-Cambria	State Game Lands No. 26 --	1921	1,727.0	7,382.74
28	Cumberland -----	Michaux State Forest -----	1920	1,409.0	*
	Elk -----	State Game Lands No. 28 --	1920	2,622.0	6,520.7
Kalbhus 29	Warren -----	State Game Lands No. 29 --	1921	2,369.0	6,449.51
30	McKean -----	State Game Lands No. 30 --	1925	2,874.0	8,698.03
31	Jefferson -----	State Game Lands No. 31 --	1923	541.0	3,360.36
32	Huntingdon -----	Logan State Forest -----	1921	1,393.0	*
33	Centre -----	State Game Lands No. 33 --	1925	2,904.0	6,941.1
34	Clearfield-Elk -----	State Game Lands No. 34 --	1925	2,068.0	6,732.0
35	Susquehanna -----	State Game Lands No. 35 --	1926	1,500.0	5,244.35
36A	Bradford -----	State Game Lands No. 36 --	1932	180.0}	11,673.00
36B	Bradford -----	State Game Lands No. 36 --	1932	265.0}	
37	Tioga -----	State Game Lands No. 37 --	1932	334.0	3,807.72
39	Venango -----	State Game Lands No. 39 --	1931	1,008.0	6,084.58
40	Carbon -----	State Game Lands No. 40 --	1932	311.0	1,237.8
42	Westmoreland -----	State Game Lands No. 42 --	1926	765.0	3,841.0
44A	Elk -----	State Game Lands No. 44 --	1925	1,045.0}	22,504.1
44B	Elk -----	State Game Lands No. 44 --	1926	525.0}	
45	Venango -----	State Game Lands No. 45 --	1932	289.0	2,782.7
46	Lancaster -----	State Game Lands No. 46 --	1932	210.0	1,549.8
47	Venango -----	State Game Lands No. 47 --	1932	375.0	1,685.0
48	Bedford -----	State Game Lands No. 48 --	1930	391.0	3,689.4
49	Bedford-Fulton -----	State Game Lands No. 49 --	1930	495.0	2,643.2
51A	Fayette -----	State Game Lands No. 51 --	1933	727.0}	6,072.0
51B	Fayette -----	State Game Lands No. 51 --	1933	317.0}	
52	Lancaster -----	State Game Lands No. 52 --	1932	195.0	1,230.0
54A	Jefferson -----	State Game Lands No. 54 --	1932	580.0}	17,830.0
54B	Jefferson -----	State Game Lands No. 54 --	1929	315.0}	
55	Columbia -----	State Game Lands No. 55 --	1925	261.0	1,540.2
56A	Bucks -----	State Game Lands No. 56 --	1919	219.0}	943.4
56B	Bucks -----	State Game Lands No. 56 --	1919	228.0}	
57A	Wyoming -----	State Game Lands No. 57 --	1934	590.0}	
57B	Wyoming -----	State Game Lands No. 57 --	1933	325.0}	17,790.3
57C	Wyoming -----	State Game Lands No. 57 --	1933	360.0}	
58A	Columbia -----	State Game Lands No. 58 --	1925	447.0}	8,069.3
58B	Columbia -----	State Game Lands No. 58 --	1932	367.0}	
59	Potter -----	State Game Lands No. 59 --	1933	466.0	6,190.2
61	McKean -----	State Game Lands No. 61 --	1933	548.0	7,594.2

63	Clarion	State Game Lands No. 63	1932	328.0	2,442.4
65	Fulton	State Game Lands No. 65	1932	625.0	2,409.6
68	Lycoming	State Game Lands No. 68	1932	387.0	2,618.7
69	Crawford	State Game Lands No. 69	1933	472.0	1,832.9
70	Wayne	State Game Lands No. 70	1932	228.0	2,050.6
72	Clarion	State Game Lands No. 72	1926	510.0	1,509.0
73	Bedford	State Game Lands No. 73	1927	392.0	9,622.2
76	Franklin	State Game Lands No. 76	1925	471.0	1,624.2
78	Clearfield	State Game Lands No. 78	1925	582.0	138.7
79	Cambria	State Game Lands No. 79	1933	300.0	1,759.2
80	Lebanon	State Game Lands No. 80	1925	315.0	2,592.3
82	Somerset	State Game Lands No. 82	1933	243.0	1,040.7
84	Northumberland-Schuyl-kill	State Game Lands No. 84	1926	251.0	4,020.0
93	Clearfield	State Game Lands No. 93	1924	800.0	3,917.1
Totals				91,522.7	290,547.64

\* Many Thousands of Acres of State Forest Lands Open to Hunting.



Fire Tower On State Game Lands No. 77



JUNE 1, 1932 TO MAY 31, 1934 INCLUSIVE

[illegible]